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COOPERATIVE DAIRY BULL ASSOCIATIONS

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A COOPERATIVE DAIRY BULL ASSOCIATION is an organization formed by dairy farmers to facilitate the joint ownership, use, and exchange of dairy bulls. Its primary objects are to enable the members or herd owners to (1) obtain the services of better sires than they could obtain as individuals, (2) to increase production in their herds, and (3) to carry on a long-time breeding program of herd improvement. The use of good proved bulls—bulls that have demonstrated that they can increase production in their female progeny—is the surest, quickest, and least expensive way to build up a high-producing herd.

In a well-managed bull association, the bulls are carefully selected, fed properly, and given good care. The returns from a properly organized and managed association are large in proportion to the cost per member.

This bulletin describes the essential principles to be observed in organizing and operating cooperative dairy bull associations and points out some of the mistakes that should be avoided. It supersedes Farmers' Bulletin 993, Cooperative Bull Associations, and Farmers' Bulletin 1532, Dairy Herd Improvement Through Cooperative Bull Associations.

COOPERATIVE DAIRY BULL ASSOCIATIONS

By JOEL G. WINKJER, *associate dairy husbandman, Division of Dairy Herd Improvement Investigations, Bureau of Dairy Industry*

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INTRODUCTION

THE ORGANIZATION of a cooperative dairy bull association is in many cases the only way dairy farmers can obtain the use of a good dairy bull. The average dairyman in the United States is usually not in position to own a high-class dairy sire, but he may, by joining with his neighbors in a cooperative dairy bull association, obtain the use of superior sires and in addition have the benefits of a long-time, low-cost, progressive dairy cattle breeding program.

The need for improvement in many dairy herds is obvious from the fact that the nearly 25,000,000 cows that are kept for milking purposes in the United States produce an average of only about 170 pounds of butterfat per cow per year. Many of the bulls to which these cows are mated are animals of inferior breeding and are unable to increase production in the herds where they are used. Until such bulls are replaced with good dairy bulls, little improvement in the producing ability of dairy herds generally can be expected.

Cooperative bull associations provide the facilities for any dairyman, regardless of the size of his herd, to obtain the services of high-class bulls at reasonable cost.

Through cooperative ownership, dairymen with small herds who cannot afford to own individually the kind of bull they need to improve their herds, may obtain the services of valuable bulls at a cost usually no greater than that of owning and keeping inferior bulls in their individual herds. A dairyman with a large herd who prefers to have a herd sire on his own farm will also benefit from joining a bull association. He can retain practically all the advantages of an individual breeder and have in addition the advantages of belonging to the bull association.

WHAT CONSTITUTES A COOPERATIVE DAIRY BULL ASSOCIATION?

A typical cooperative dairy bull association consists of three to five blocks, each block having one or more dairy herds (pp. 9 and 10). At least one bull is assigned to each block. The herd owners, or members, in each block use an association bull for 1 or 2 years. At the end of each 1- or 2-year period, in order to prevent inbreeding, each bull is shifted to the next block in the circuit and is replaced by a bull from another block.

The extension section of the American Dairy Science Association established in 1937 the following standards for cooperative dairy bull associations:

1. An association shall own three or more bulls and shall consist of three or more blocks.
2. All members shall sign a membership agreement blank. A constitution and bylaws shall be adopted. The association shall have the necessary officers to insure its efficient operation.
3. All bulls shall be owned by the association, and this ownership shall be recorded on the herdbooks of the breed association in which the bulls are registered. No association bull shall be owned by an individual.
4. The association shall hold regular annual meetings.

A panoramic view of a bull association and a meeting of the members is shown in figure 1.

COST OF BELONGING TO A BULL ASSOCIATION

No definite statement can be made as to the amount of money required to establish a cooperative dairy bull association. It depends largely on the number of members, the price of the bulls purchased, and the local conditions. The expenses for quarters, feed, and good care of the bulls are shared by the members and would be no greater than if the bulls were owned by individual farmers.

The following figures from three typical associations show that the investment in bulls per member may vary considerably. In one association four bulls were purchased at a total cost of \$1,104. The average cost to each farmer was approximately \$42. In another association it cost about \$53 per member to pay for six bulls purchased at a total cost of \$1,656. In a third association the average cost of purchasing four bulls for \$4,800 was \$240 per member.

Some years ago the Department of Dairy Husbandry of the Idaho Agricultural Experiment Station, in cooperation with the Bureau of Dairy Industry of the United States Department of Agriculture, made a study of the bull associations in that State. The results were published as Idaho Agricultural Experiment Station Bulletin 161, Study of Bull Associations in Idaho.

Of 682 dairy farmers who became members of 20 bull associations only 116, or about 17 percent, owned dairy bulls when they joined these associations. The average value of their bulls was \$82. The other 566 farmers owned no dairy bulls when they joined, but were using any bull of any breed that was available.

The 20 associations bought 112 bulls at a total cost of \$23,864, or an average cost of about \$213 per bull. The average cost to the 682 members was \$35.

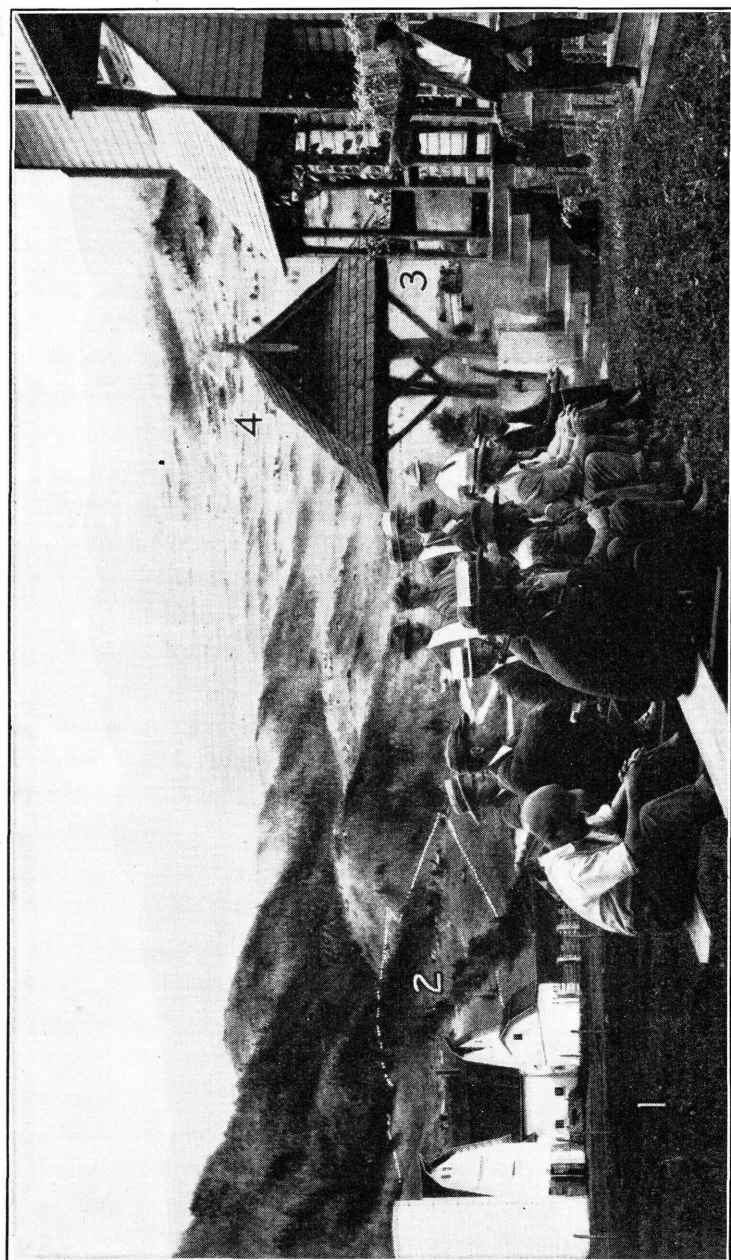


FIGURE 1.—The arrangement of blocks in a cooperative dairy bull association. This one consists of four blocks. The members are holding a meeting at the farm of the one member making up block No. 1. The speaker is pointing toward block No. 2. This block has three farms or members. Block No. 3 is also made up of only one member. Block No. 4 has seven members.

RETURNS FROM BULL ASSOCIATIONS

The value of a cooperative dairy bull association to its members, based on the returns for the money invested, is not easily determined. After the 20 Idaho associations were organized, each dairyman had the use of several bulls, and a definite breeding program was established for every member regardless of the size of his herd. At the time of organization less than 50 percent of the cows of the members' herds were of the same breed, including grades, as the bulls purchased, but after 4 years 73 percent were of the breed used by the bull association. The rate of increase in percentage of cattle reported as purebred was even greater. The high quality of bulls provided was the chief cause for the interest of the members in developing a definite line of breeding.

Figure 2 illustrates an unimproved herd and figure 3 the results obtained in an association herd.

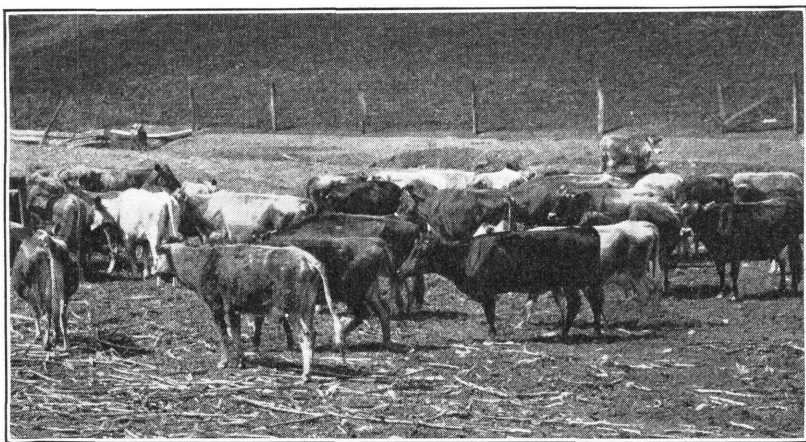


FIGURE 2.—A herd with mixed breeding. Bull associations enable members to develop a definite breeding program for their dairy herds.

In one of the Idaho bull associations, daughters of the bulls were sold at the age of 2 years or over for an average price of \$28 more than that received for females of the same age from stock the members had owned before the association was organized and put into operation. Consequently the extra returns from the sale of two daughters would more than pay a member for his investment in the association.

A comparison of the production records of 48 daughters of 16 bulls owned by the Idaho associations with the records of the daughters' dams shows that the members must have received good returns on their investment. These daughters averaged 13 percent more milk and 23 percent more butterfat per year than their dams. The average increase in butterfat production was 76.8 pounds. Since these daughters doubtless continued to produce more butterfat than their dams each year of their producing life, their owners apparently received extra returns in milk and butterfat production for many years.

Proved-sire records on 17 bull-association bulls in service January 1, 1938, showed that 167 of their daughters produced an average of

45 pounds more butterfat than their dams. The bulls averaged approximately 10 daughters when proved. Assuming that each bull had 10 tested daughters and their average production was the same as that for all the association daughters, the 10 daughters would produce each year approximately 450 pounds more butterfat than their dams, which, at 30 cents per pound, would amount to \$135.

DEVELOPMENT OF BULL ASSOCIATIONS

The first cooperative dairy bull association in the United States was organized in 1908 in Michigan. On January 1, 1939, there were more than 200 associations in active operation in this country. During the last 30 years hundreds of such organizations have been formed throughout the United States. Some of them have lived and prospered, but many others have discontinued operation. Prac-

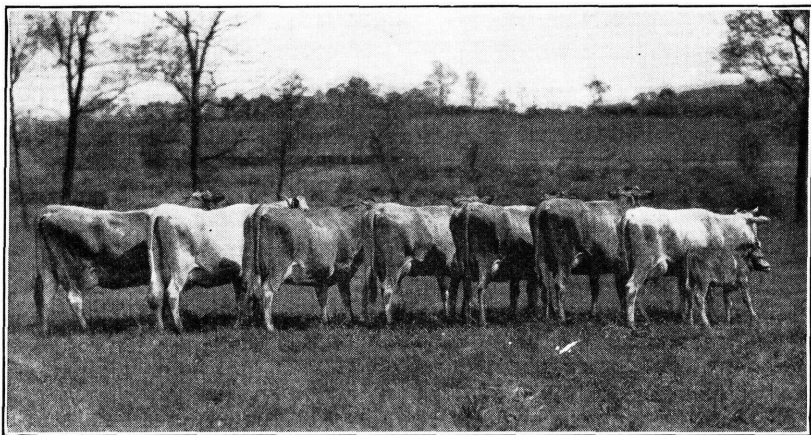


FIGURE 3.—A herd developed in a bull association. The cow on the extreme left is the foundation cow. The next five cows are her daughters from different bulls. The last heifer is her granddaughter, and the calf is her great-granddaughter.

tically none have been operated with direct financial loss. From those that prospered, as well as from those that have ceased operation, much experience has been gained and many facts learned which should serve as a basis for more successful development in the future.

A bull association is one of the simplest of cooperative organizations. This simplicity often invites neglect to organize and operate the association on sound business principles. One that is loosely organized or poorly managed usually lasts only a few years, with the result that its members are deprived of its full benefits. It is advisable, therefore, that each one should be set up and operated as an agricultural extension project under the supervision of the county agricultural agent and the State extension dairyman. The county agent is the logical person to lead in forming the organization and to advise on the operation and management. Organizing and operating the project with the advice and guidance of the county agent and the State extension service has been found to be very helpful to the members in keeping their association active and useful.

PROCEDURE IN ORGANIZING AN ASSOCIATION

Local conditions will influence to a great extent the course to be followed in organizing a cooperative bull association. In a general way the steps usually taken are as follows: (1) Obtaining information on the subject of bull associations; (2) making a survey of the community to determine whether the conditions are favorable for such a project; (3) creating interest in the plan as a means of improving dairy herds; (4) soliciting members and getting prospective members to sign the preliminary agreement; (5) holding the organization meeting; (6) purchasing bulls; and (7) developing and maintaining the proper management.

OBTAINING INFORMATION

If the dairymen of any community desire to organize a bull association, they should obtain from their county agent, their State extension dairyman, and the United States Department of Agriculture all the available literature on the subject, including copies of the constitution and bylaws in use in well-organized bull associations. The Bureau of Dairy Industry has prepared a suggested constitution and bylaws, which is available on request, designed to cover the general conditions usually found in the average dairy community.

SURVEYING THE COMMUNITY

After obtaining all the information possible, the dairymen should consult the county agent and the State extension dairyman regarding the details of making a survey of conditions and a canvass for prospective members. An organization committee of leading dairymen headed by the county agent may be formed to make the survey and conduct the canvass.

The preliminary survey should show (1) the general limits of the area within which it is proposed to form an association, (2) the names of dairymen in the community, (3) the approximate size of their herds, (4) the general location of farms, buildings, and roads for forming convenient blocks, (5) what dairymen own bulls individually, (6) general breeding of the herds, and (7) any dairymen who belong to a dairy herd-improvement association or own proved bulls. Most of this information may already be known to the committee, so that very little additional work will be necessary to decide whether the local conditions justify a canvass by the committee to form an association.

AROUSING INTEREST

As most dairy-farming communities will benefit from a bull association, the problem of creating interest in having one is largely that of presenting full information concerning its advantages. All dairymen should be advised of the benefits of becoming members.

One good way to create interest consists in having the State extension dairyman or county agent hold dairy-cattle-breeding schools in the community where organization is contemplated. In some instances several 1- or 2-day sessions may be required; in others a single session will suffice to develop the necessary interest. The breeding school provides an opportunity to discuss the importance of improv-

ing dairy cattle. Breeding problems may be studied, the fundamental principles of breeding discussed, and the sessions may be concluded with one county-wide meeting at which a "scrub-sire trial" is staged. A suggested outline for such a trial can be obtained on request from the United States Department of Agriculture.

The following film strips have been found instructive helps to the extension service representative or county agent and are available for purchase at contract prices through the Division of Cooperative Extension, United States Department of Agriculture, Washington, D. C.: (1) The Cooperative Bull Association, (2) Better Sires, and (3) Some Principles of Breeding as Demonstrated with the Herediscopes.

When meetings or schools are not deemed practical, a series of circular letters setting forth the benefits of bull associations may be mailed to a list of prospective members.

Occasionally bull associations may be organized without any advance work, such as meetings or circular letters. The county agent or members of his committee may visit prospective members and present the plan to each dairyman individually.

SOLICITING MEMBERS

After meetings have been held or letters sent presenting the principles of bull associations, the county agent or members of his committee should call on those dairymen who are likely to be interested. In some cases most of the dairymen interested can be enrolled at the close of the preliminary meetings or breeding-school sessions. In such cases a limited amount of field work will likely obtain the necessary members for completing the organization.

During the preliminary solicitation for prospective members the location of the various blocks should be tentatively arranged. The location, development, and operation of the blocks are discussed on pages 8 to 12.

In soliciting members it is usually most satisfactory to have the dairymen who have decided to join sign a preliminary agreement. When a sufficient number have signed the preliminary agreement, the organization meeting is next in order.

ORGANIZATION MEETING

If the membership canvass shows that an association can be organized in the community, a meeting of those interested should be held, at which time the association may be formally organized. All dairymen who have signed preliminary agreements and other prospective members should be called. The State extension dairyman should be present at this meeting and act in an advisory capacity regarding the various steps to be taken in forming a satisfactory organization.

INCORPORATION

For the legal protection of the members it is recommended that the association be incorporated. Previous to the meeting the county agent or some member of his committee should obtain full information concerning the State laws for incorporation. Many States have

special laws governing cooperative associations. Unless some member of the committee will obtain the necessary forms from the secretary of State and acquaint himself with the proper procedure, it may be advisable to engage an attorney to assist in the incorporation proceedings.

In some States capital stock is necessary for incorporation. In such cases it is suggested that the capital stock be made a nominal amount of \$1 a share and that one share be issued per member. The necessary funds for purchasing bulls and paying current expenses are then raised by assessment.

SELECTION OF OFFICERS AND BULL-PURCHASING COMMITTEE

After the association, under the direction of a temporary chairman, has been incorporated and the constitution and bylaws have been adopted, permanent officers should be elected. The selection of suitable officers, particularly the secretary, has much to do with successful operation. The secretary should be a good businessman, public-spirited, and well-liked in his community. If he possesses these qualifications, the business will usually be successful. A good president can do much to mold into form the wishes of the membership, and the secretary-treasurer can have a great deal of influence on the interest of the members and the activity of the association.

At the organization meeting a committee should be selected for the purchase of the bulls. The usual procedure is for the president to select two or four members who with himself form a committee to locate and purchase suitable bulls. It is also advisable to have the county agent or some other representative of the State agricultural extension service a member of the purchasing committee.

LIMITATION OF MEMBERSHIP

The membership is the foundation of the association. Only men who expect to stay in the dairy business and expect to live permanently in the community should be selected to become members.

In the eagerness to organize there may be a tendency to take in the greatest possible number of members. This may come from a natural desire to permit as many farmers in the locality as possible to enjoy the benefits of being a member. However, indiscriminate effort to obtain members may bring into the association individuals who are too far removed from where the bulls are kept to use one conveniently, or, for some other reason, will not keep up their interest in the organization.

If all the members are not congenial and do not continue to cooperate with their fellow members or fail to live up to their obligations, the structure of the entire association is weakened.

LOCATION OF THE BLOCKS

The various blocks of an association may be arranged without much regard to the distance from each other or the make-up of the blocks. Since the bulls are moved from one block to another only once every 1 or 2 years, moving them presents little difficulty. The blocks should not be so scattered, however, as to make it inconvenient for members to attend association meetings.

In making up each block, however, every effort should be made to include only farms that are near each other. If some of the farms are at a great distance from the farm where the bull will be kept, the inconvenience of bringing the cows to the bull usually will result in dissatisfaction. In such cases it is better to organize two blocks instead of one, even though the cost to the dairymen may be slightly higher. The convenience of having the bull near all farms will result in greater satisfaction to all, which will strengthen the association and enable it to endure.

DEVELOPMENT OF EACH BLOCK

The success of an association is dependent upon the success of the blocks. The selection of members for each block is made by those who form the block. One local dairyman with an active interest in the possibilities of such an organization will usually form the nucleus for developing a block. If he has a large herd, he may prefer to make up one block of the association alone and assume all the obligations and expense of keeping a bull. But if he desires to share these expenses with others who are conveniently located, it will then be necessary to select neighbors who can be depended on to carry out their share of the obligations that will fall on the block.

The number of members grouped in each block is dependent entirely upon the wishes of the members forming the block. Flexibility in the number makes it possible to organize blocks suitable to almost any condition. In some cases there may be only one member in each block, or there may be one member in one block and several members in each of the other blocks in the same association.

Table 1 shows the number of associations that had only one member to the block and the number that had more than one to the block, in the four States having the largest number of bull associations on January 1, 1938.

TABLE 1.—*Cooperative dairy bull associations in Pennsylvania, New York, Illinois, and New Jersey, grouped according to number of members in each block, January 1, 1938*

State	Total associations	Associations with—		State	Total associations	Associations with—	
		1 member to each block	More than 1 member to each block			1 member to each block	More than 1 member to each block
Pennsylvania.....	Number 50	Number 25	Number 25	Illinois.....	Number 24	Number 21	Number 3
New York.....	29	16	13	New Jersey.....	14	14	0

LENGTH OF TIME IN OPERATION AND THE NUMBER OF BLOCKS IN EACH ACTIVE ASSOCIATION

While it appears that five blocks may be the most desirable number, as it allows the shifting of the bulls for approximately the full period of their serviceable life, the association may have practically any number of blocks and be successful. Table 2 shows that out of 166

associations reported active January 1, 1938, 36 had operated for 10 or more years. The longevity of these associations, also the number having three, four, five, or more blocks is shown.

TABLE 2.—*Number of bull associations active January 1, 1938, grouped by years in which they were organized and by the number of blocks in each association*

Year organized	Associa- tions organized	Associations with—			
		3 blocks	4 blocks	5 blocks	More than 5 blocks
	<i>Number</i>	<i>Number</i>	<i>Number</i>	<i>Number</i>	<i>Number</i>
1937.....	34	11	20	3	0
1936.....	33	7	11	10	5
1935.....	17	7	6	1	3
1934.....	11	6	3	2	0
1933.....	11	3	2	4	2
1932.....	5	0	2	1	2
1931.....	4	1	2	0	1
1930.....	1	1	0	0	0
1929.....	3	2	0	0	1
1928.....	8	4	1	2	1
1927.....	7	3	4	0	0
1926.....	5	2	2	0	1
1925.....	4	1	3	0	0
1924.....	3	2	1	0	0
1923.....	3	1	1	0	1
1922.....	9	4	3	1	1
1921.....	0	0	0	0	0
1920.....	1	0	0	1	0
1919.....	3	1	0	0	2
1909.....	1	1	0	0	0
Year not reported.....	3	2	1	0	0
Total.....	166	59	62	25	20

FINANCING THE ASSOCIATION

Adequate financing is fundamental to the success of all cooperative dairy bull associations. No action involving expenditure of finances should be taken by the officers until complete financial arrangements have been made. Funds are necessary for purchasing bulls, providing safe-keeper pens in which to keep the animals, paying the bull keeper in each block, and developing a sinking fund with which to replace discarded sires. The procedure recommended in purchasing and keeping bulls is described in subsequent pages.

The usual procedure in financing the purchase of bulls is for each member to sign a note payable on demand for an amount covering his approximate share of the total cost. These notes are usually deposited by the treasurer in the local bank. After the committee has arranged for purchasing the bulls each note is called. Each member must then redeem his note in cash, or arrange to borrow the sum pledged on terms to suit his convenience. Regular fees and assessments for paying the bull keeper and establishing the sinking fund should be agreed upon by the members at the time the association is organized. When adequate financial arrangements have been made, very little difficulty is encountered in starting the association and keeping it in operation.

SELECTION OF BULLS

The objective of the bull association is to improve the inherent producing capacity of the members' herds through breeding. Therefore,

good bulls must be obtained. The breeding value of a bull cannot be determined by his price. The production records of five or more unselected daughters as compared with the records of their dams are a better measure of his value. The surest way to obtain a good bull is to select one that has been proved, that is, one that has demonstrated his ability to transmit high-producing capacity to a large percentage of his daughters. Unfortunately, good proved bulls are very scarce. Very often dairymen owning good proved sires join bull associations in order to keep their good bulls in service in the community as long as possible. In several States it has become common practice to organize new cooperative bull associations around these good proved sires.

A dairyman owning a good proved sire may not wish to continue to use him exclusively, because of inbreeding, or he may not feel justified in keeping two herd sires. The bull association is the logical answer to such a situation. Through a bull association the good proved bull may be placed in active service in several herds. At the same time the original owner may continue to have access to the bull.

When proved sires cannot be obtained, their sons are next to be desired. It has been demonstrated that sons of good proved sires can be used with more assurance of success than can sons of untried sires.

When neither sires with good proved-sire records nor sons of such sires are available, the next-best way to select a bull is on the basis of his pedigree. Only those bulls should be considered whose pedigrees give evidence that they have very probably inherited an ability to sire a large percentage of high-producing daughters. Bulls should not be selected merely because they are priced at a figure the association is willing to pay. If a good bull cannot be purchased at a price the members are willing to pay, the search for bulls should continue, or the association should disband. Poor bulls will lead only to disappointment, and usually to the disintegration of the association. It is not implied that farmers must pay a "long" price to obtain a good bull. Usually good bulls may be obtained at moderate prices. However, outstanding bulls with known ability to improve the producing capacity of dairy herds are cheap at any reasonable price.

OWNERSHIP OF THE BULLS

All bulls must be owned by the association and not by individual members. In case a bull proves to be inferior or is undesirable for any reason, the officers of the association should handle the situation, not the individual members.

In some associations in the past an individual member or a group of members in a block have assumed the responsibility of replacing an undesirable bull without consulting the officers. In practically all cases such a procedure has resulted in disrupting the association.

The officers are elected to handle the business of the association, and they, or a committee named by them, should have complete jurisdiction over the purchase, sale, and exchange of all bulls. When an unsatisfactory bull is discarded, any loss is borne by the association, not by any individual or block. A new bull purchased by the association is placed in the block from which the unsatisfactory one was discarded.

SHIFTING BULLS IN THE ASSOCIATION

A definite plan for shifting the bulls from block to block should be developed at the time the association is organized. At intervals of approximately 2 years (p. 2) all bulls should be shifted in order to prevent inbreeding as well as to permit all members to have the use of several sires. In recent years many associations have found it desirable to shift the bulls at intervals of about 1 year. This is especially advisable when the bulls are not proved, as the risks from using a poor one or the benefits from the good ones are more evenly distributed among the members. When the members fully understand that the bulls belong to the association and have agreed upon a plan for shifting them, dissatisfaction seldom occurs among the members when the bulls are shifted.

CARE OF THE BULLS

The association is only as valuable as its bulls. Therefore, the care of the bull is very important. The responsibility of properly

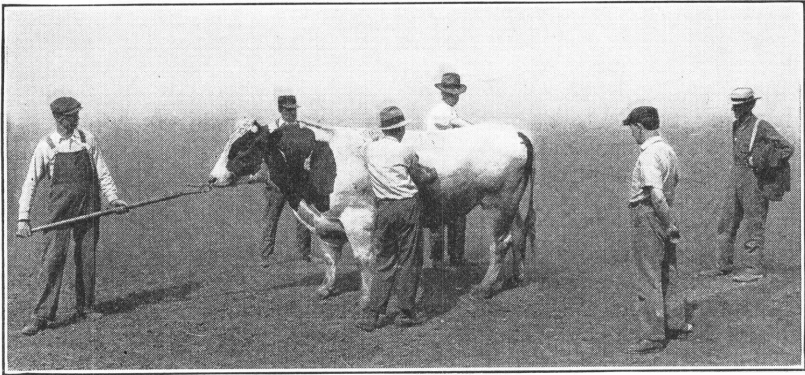


FIGURE 4.—Board of directors inspecting a bull. The association entrusts them with responsibility for proper care of the bulls. Periodic inspection of the animals and discussion with the members regarding progressive breeding plans are important for the welfare of the association.

caring for the bulls is entrusted to the board of directors (fig. 4). Bulls must be kept in good condition if they are to give the best breeding service. If they are kept properly, they will live longer, and the members will be better satisfied with their investment. Each block is responsible to the directors for the proper care of the bull assigned to it.

The keeper of the bull in each block should possess full information on the care of bulls. Such information can be obtained from the State extension dairyman. Farmers' Bulletin 1412, Care and Management of Dairy Bulls, should also be helpful.

SAFE-KEEPER BULL PEN

Facilities for the proper care of bulls must include a safe-keeper bull pen for each animal. As soon as the bull keepers are selected, satisfactory pens should be constructed so that the bulls may be

properly housed from the time they come into the association. The association may make arrangements for constructing a pen in each block and charge each block the average cost of all the pens, but perhaps a more satisfactory way is for each block to construct its own pen and apportion the cost among its members. All pens must conform to the requirements made by the board of directors. No bull is a safe bull. The most vicious one, however, can be safely kept in a safe-keeper bull pen. Satisfactory pens need not be elaborate and can be constructed at moderate cost.

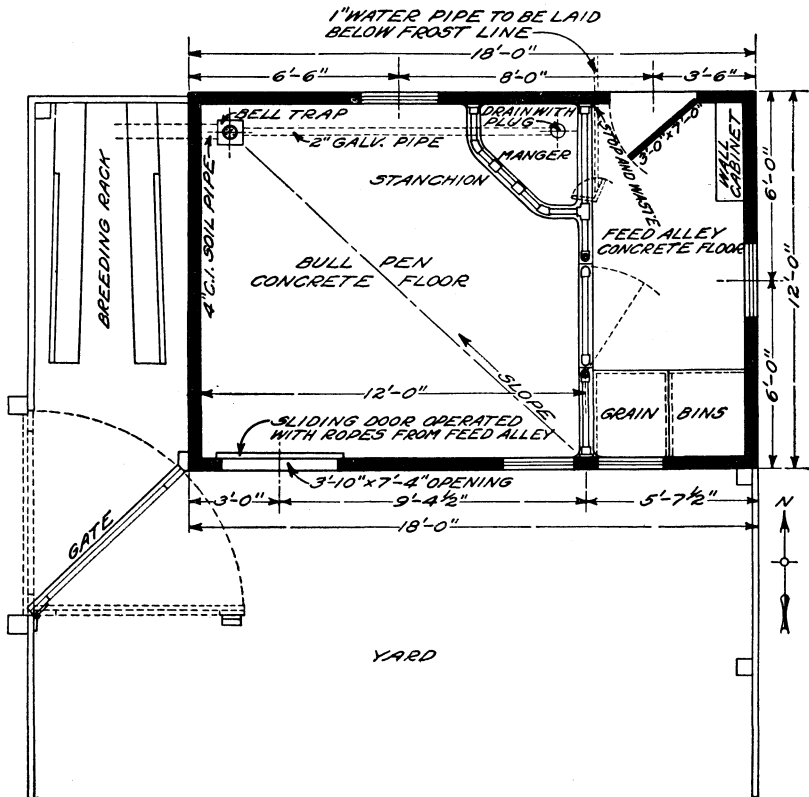


FIGURE 5.—Plan of safe-keeper bull pen.

Plans for constructing bull pens can be obtained from the State college of agriculture or the Bureau of Agricultural Engineering of the United States Department of Agriculture. The plan of a safe-keeper pen which incorporates the essential safety features is shown in figure 5. In a pen of this type all the necessary care and handling of the bull can be done effectively and without the slightest danger to the keeper.

The bull can be fed and watered from the feeding alley. When it is necessary to fasten him, the stanchion can be reached from the alley. When it is desired to have the bull pass between the stall and the exercise yard, a sliding door can be opened or closed by means

of a rope within reach from the feeding alley. The swinging gate to the yard permits the full use of the breeding stall without exposing the keeper to danger at any time. This gate also permits with complete safety backing a wagon into the yard to remove manure. The stall may be in a detached building or in a corner of the barn (fig. 6).

Some dairy farmers use the electric fence for bull pens. To rely entirely on one or two electrified wires to stop a savage bull would be unsafe. The charged wire or wires may be attached to brackets on the inside of a regular fence, so that the wires are held securely about 18 to 20 inches away from the fence. If an electric fence is to be used, the county agent or State agricultural engineering specialist should be consulted. Home-made devices are generally un-

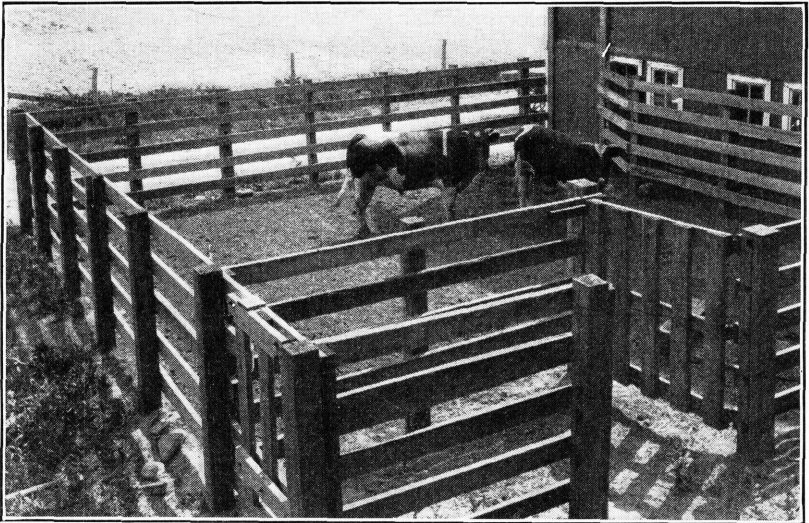


FIGURE 6.—Exercise yard and breeding chute of an inexpensive safe-keeper bull pen. The stall is in the barn.

satisfactory or dangerous and should not be used. Only tested and approved devices should be considered in building an electric fence. Further information on bull pens and fences is given in Farmers' Bulletin 1412, *Care and Management of Dairy Bulls*.

SPARE BULL

The spare-bull plan is a practical method of reducing the risk involved in selecting young sires. This plan, which is used by several New York associations, permits the "sampling" of young bulls to determine their breeding value before they are used extensively in any of the herds.

After the bull association is in operation and a bull has been assigned to each block, the association buys a young bull to be used as a "spare." As soon as this bull is of breeding age, he is circulated at definite periods so as to make the entire circuit of the blocks each year. Each member agrees to use the young bull on young

heifers and a few cows in order to have a representative sample of his heifer calves. This arrangement provides a sample of the young bull's daughters at a minimum risk to any one herd. As soon as the daughters of the bull have completed their first lactation records, the directors decide upon the merits of the bull, basing their judgment on records of daughters in each of the herds, rather than in only one of the herds. When the spare bull takes a place in the regular circuit or is discarded, a new spare bull is purchased and tried out.

Under the spare-bull plan there is the added advantage that the association has an extra bull ready to place in any block which may suddenly find itself without a sire. Such prompt action usually prevents any dissatisfaction or inconvenience which might occur among the members in the block if it should be without a bull for any length of time.

DISEASE CONTROL

It is essential that all the members be in accord on the matter of disease control. An association may operate without any special arrangement, or it may establish a rigid disease-control program. An association cannot exist if some of the blocks or members within a block exercise disease control and others disregard it entirely.

It is especially important that adequate arrangements be made for the control of diseases that may be spread by means of the bull. Instructions on the care of dairy bulls and precautions to insure purchasing only healthy bulls are given in Farmers' Bulletin 1412, Care and Management of Dairy Bulls, and similar information on the care of dairy cows and purchasing healthy replacements, is presented in Farmers' Bulletin 1470, Care and Management of Dairy Cows.

ASSOCIATION MEETINGS

The importance of regular meetings cannot be overemphasized. Too often a bull association is organized and operated with no plan for holding regular meetings. Unless meetings are definitely scheduled they are usually not held. An association that does not hold at least one meeting annually is usually disintegrating. Association meetings are important and necessary to: (1) Maintain interest in the association; (2) properly conduct the business affairs of the association; (3) keep the membership informed of the progress being made; (4) develop in the membership a thorough understanding of the progressive long-time breeding program planned and being carried out in each herd.

ASSOCIATION RECORDS

If an association is to operate in a businesslike manner, a complete record of its activities must be kept. The secretary or secretary-treasurer must assume the responsibility of keeping a complete record of the association. In order to assist this officer in keeping satisfactory records, the Bureau of Dairy Industry has prepared a secretary-treasurer record book which is especially designed to insure that all activities of the association, including the first organization meeting, are properly recorded. This record book (BDIM-723) may be ob-

tained through the office of the State extension dairyman for use in associations operating under the supervision of the State agricultural extension service.

As the secretary-treasurer keeps a record of the entire association, the chairman of each block should keep a complete record of all the activities within his block. The bull keeper should keep a breeding record of all cows. Copies of the records kept by the block chairman and the bull keeper should be filed periodically with the secretary.

BULL ASSOCIATIONS AND DAIRY HERD IMPROVEMENT

Bull associations should operate along with dairy herd-improvement associations. The bull association provides a long-time, low-cost breeding program, while the dairy herd-improvement association provides the production records of the daughters of the bulls and their dams, to indicate the breeding value of the bulls.

A close cooperation of the two organizations will be even more advantageous in the future than it has been in the past. Through the Nation-wide sire-proving program and the identification and permanent-record plan now being carried out in dairy herd-improvement associations, all information assembled in the files of the Bureau of Dairy Industry on association bulls will be made available periodically to the bull-association members. Also, before the annual meeting of each bull association, complete tabulations of all data assembled on all association bulls will be forwarded to the State by the Bureau for use at the meeting.

Dairy herd-improvement association members should be encouraged to become members of a bull association. Likewise, bull association members should be encouraged to join a dairy herd-improvement association. When the two organizations operate jointly the benefits of both are greatly enhanced.

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